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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,470	01/30/2001	Eric D. Peterson	ACSC 60716 (1244)	5284

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EXAMINER	
STAICOVICI, STEFAN	

ART UNIT	PAPER NUMBER
1732	

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Applicati n No.	Applicant(s)
	09/774,470	PETERSON, ERIC D.
	Examiner	Art Unit
	Stefan Staicovici	1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,7,16 and 19-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 7, 16 and 19-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 25, 2003 has been entered.

Response to Amendment

2. Applicant's amendment filed October 30, 2003 has been entered. Claims 1-3, 7, 16 and 19-21 are pending in the instant application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen *et al.* (US Patent No. 5,722,609) in view of Becker *et al.* (US Patent No. 4,251,305).

Nguyen *et al.* ('609) teach the basic claimed process of forming a catheter component including, providing a polyurethane polymeric tube (220) onto a metallic guidewire (226),

covering said polyurethane polymeric tube and guidewire with a polyethylene heat shrink tubing and, heat shrinking said polyethylene heat shrink tubing such that said polyurethane polymeric tubing (220) tubing is fused onto said metallic guidewire core (226) (see col. 9, lines 46-51 and Figure 8). Further, Nguyen *et al.* ('609) teach that heating occurs at the heat shrinking temperature of the heat shrinking tube. It is submitted that the heat shrinking temperature of polyethylene is in a range between the glass temperature and the melting temperature of said polyurethane polymeric material.

Regarding claim 1, although Nguyen *et al.* ('609) teach heating of said polyethylene heat shrink tubing, Nguyen *et al.* ('609) does not specifically teach external heating. Becker *et al.* ('305) teach the use of infrared lamps (external direct heating) to heat a heat shrinking tube (see col. 4, lines 30-48 and col. 5, lines 53-60). Therefore, it would have been obvious for one of ordinary skill in the art to have used the infrared lamp heating arrangement of Becker *et al.* ('305) to externally heat in the process of Nguyen *et al.* ('609) because, Becker *et al.* ('305) specifically teach that infrared heating provides for a fast, efficient way of heating both the shrink tubing and the polymeric material, hence providing for an improved process and also because, Nguyen *et al.* ('609) teach heating of said polyethylene heat shrink tubing.

In regard to claim 2, Nguyen *et al.* ('609) teach a polyurethane polymeric tube (220) onto a metallic guidewire (226).

Specifically regarding claim 5, Nguyen *et al.* ('609) teach removing of said polyethylene shrink tubing after bonding has occurred (see col. 9, lines 56-58).

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen *et al.* (US Patent No. 5,722,609) in view of Becker *et al.* (US Patent No. 4,251,305) and in further view of Sirhan *et al.* (US Patent No. 5,743,875).

Nguyen *et al.* ('609) in view of Becker *et al.* ('305) teach the basic claimed process as described above.

Regarding claim 3, although Nguyen *et al.* ('609) teach the use of polyester, nylon, polyethylene and polyurethane as polymeric materials (see col. 9, lines 59-61), Nguyen *et al.* ('609) in view of Becker *et al.* ('305) do not specifically teach PEEK. Sirhan *et al.* ('875) teach that PEEK, polyester, nylon are equivalent materials (see col. 9, lines 49-55) in making a catheter. Therefore, it would have been obvious for one of ordinary skill in the art to have provided a PEEK polymeric material as taught by Sirhan *et al.* ('875) in the process of Nguyen *et al.* ('609) in view of Becker *et al.* ('305) because, Sirhan *et al.* ('875) specifically teach that PEEK, polyester, nylon are equivalent materials and also because, Sirhan *et al.* ('875) specifically teach that a PEEK/metallic bond is an equivalent alternative to a polyester/metallic bond.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen *et al.* (US Patent No. 5,722,609) in view of Becker *et al.* (US Patent No. 4,251,305) and in further view of Riggs (US Patent No. 4,636,272).

Nguyen *et al.* ('609) in view of Becker *et al.* ('305) teach the basic claimed process as described above.

Regarding claim 7, although Nguyen *et al.* ('609) teach the use of a polyethylene shrink tube (see col. 9, line 49), Nguyen *et al.* ('609) in view of Becker *et al.* ('305) do not specifically teach a fluoropolymer shrink tube. Riggs ('272) teaches a process for bonding polymeric tubes (28, 34) including, using a Teflon (fluoropolymer) heat shrinking member (38) to apply pressure and removing said member after bonding has occurred. Therefore, it would have been obvious for one of ordinary skill in the art to have provided a Teflon (fluoropolymer) heat shrinking member as taught by Riggs ('272) as an alternative to a polyethylene shrink tube in the process of Nguyen *et al.* ('609) in view of Becker *et al.* ('305) because of known advantages that fluoropolymers provide such as increased releasability and also because, all references teach similar processes.

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen *et al.* (US Patent No. 5,722,609) in view of Becker *et al.* (US Patent No. 4,251,305) and in further view of JP 60-004579.

Nguyen *et al.* ('609) in view of Becker *et al.* ('305) teach the basic claimed process as described above.

Regarding claim 19, Nguyen *et al.* ('609) in view of Becker *et al.* ('305) do not teach a masking tape. JP 60-004579 teaches the use of a masking tape for providing temporary surface protection. Therefore, it would have been obvious for one of ordinary skill in the art to have provided a masking tape as taught by JP 60-004579 in the process of Nguyen *et al.* ('609) in view of Becker *et al.* ('305) because, JP 60-004579 specifically teaches that the use of a masking

tape provides for temporary surface protection, said masking tape being easily stripped off after processing has occurred, hence providing for an improved process and resulting article.

8. Claims 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen *et al.* (US Patent No. 5,722,609) in view of Becker *et al.* (US Patent No. 4,251,305) and in further view of Palermo *et al.* (US Patent No. 5,769,796).

Nguyen *et al.* ('609) in view of Becker *et al.* ('305) teach the basic claimed process as described above.

Regarding claim 16, Nguyen *et al.* ('609) in view of Becker *et al.* ('305) do not teach that said polymeric member has a deformed and an undeformed section. Palermo *et al.* ('796) teach a catheter composite guidewire having a metallic wire (174) and a polymeric layer bonded thereonto (180) such that polymeric layer includes both a deformed section, where bonding has occurred and, an undeformed section, where bonding has not occurred (see Figure 6B). It would have been obvious for one of ordinary skill in the art to have provided said polymeric member has a deformed and an undeformed section as taught by Palermo *et al.* ('796) in the catheter guidewire obtained by the process of Nguyen *et al.* ('609) in view of Becker *et al.* ('305) because, Palermo *et al.* ('796) specifically teach that such a design permits the addition of a radiopaque material that allows increased strength and tracking of said guidewire (see col. 7, lines 24-33), hence providing for an improved product and also because, both Nguyen *et al.* ('609) and Palermo *et al.* ('796) teach the similar end-products, catheter guidewires.

In regard to claim 20, Nguyen *et al.* ('609) teach removing of said polyethylene shrink tubing after bonding has occurred (see col. 9, lines 56-58).

9. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen *et al.* (US Patent No. 5,722,609) in view of Becker *et al.* (US Patent No. 4,251,305) and in further view of Palermo *et al.* (US Patent No. 5,769,796) and JP 60-004579.

Nguyen *et al.* ('609) in view of Becker *et al.* ('305) and in further view of Palermo *et al.* ('796) teach the basic claimed process as described above.

Regarding claim 21, Nguyen *et al.* ('609) in view of Becker *et al.* ('305) and in further view of Palermo *et al.* ('796) do not teach a masking tape. JP 60-004579 teaches the use of a masking tape for providing temporary surface protection. Therefore, it would have been obvious for one of ordinary skill in the art to have provided a masking tape as taught by JP 60-004579 in the process of Nguyen *et al.* ('609) in view of Becker *et al.* ('305) and in further view of Palermo *et al.* ('796) because, JP 60-004579 specifically teaches that the use of a masking tape provides for temporary surface protection, said masking tape being easily stripped off after processing has occurred, hence providing for an improved process and resulting article.

Response to Arguments

10. Applicant's arguments filed September 25, 2003 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Staicovici, Ph.D. whose telephone number is (703) 305-0396 (until December 22, 2003) and (571) 272-1208 (after December 23, 2003). The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM and alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaianni, can be reached at (703) 305-5493 and (571) 272-1196 (after December 23, 2003). The fax phone number for this Group is (703) 305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Stefan Staicovici, PhD

12/A/03

Primary Examiner

AU 1732

December 17, 2003